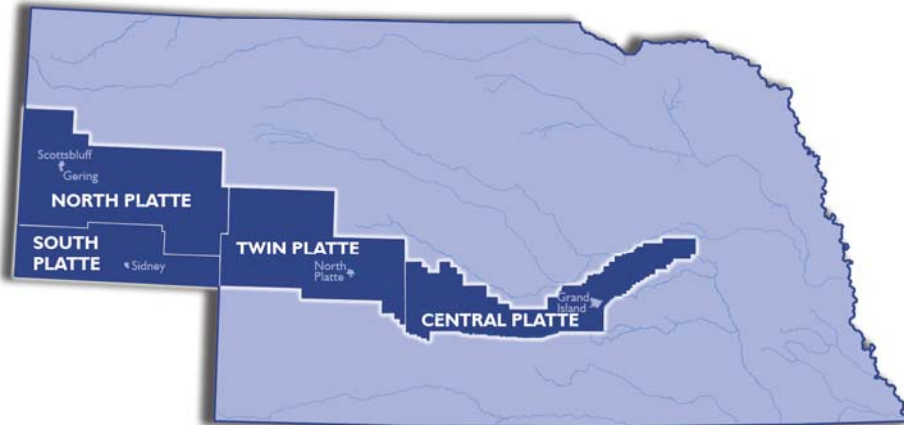


# YOUR NRD BASIN

# PLATTE RIVER

Summer/Fall 2009

Nebraska's Natural Resources Districts  
Making the Good Life Better Since 1972



PLATTE RIVER BASIN

**BASIN FACTS:** The Platte River Basin includes the following:  
North Platte NRD - Scottsbluff  
South Platte NRD - Sidney  
Twin Platte NRD - North Platte  
Central Platte NRD - Grand Island

**BASINWIDE - TOTAL LAND ACRES:**

North Platte NRD - 3,226,880  
South Platte NRD - 1,651,690  
Twin Platte NRD - 2,660,480  
Central Platte NRD - 2,136,304

TOTAL OF 1,049 ground water monitoring wells used for nitrate and static water levels basin-wide.

## Protecting Lives

## Protecting Property

## Protecting the Future

### Safe Water

Natural Resources Districts throughout the Platte River Basin use over a thousand wells to monitor nitrate levels in ground water. This is one of many things the Platte River Basin NRDs are doing to protect the lives, property, and future of Nebraskans. Safe ground water is crucial for all residents who depend on a quality source of drinking water. In high nitrate areas, constant monitoring by local NRDs has helped reduce nitrate levels, up to 40% of the goal in some areas.

NRDs provide ground water testing services and notify residents if a problem with quality or quantity is detected. NRDs also provide ground water safety education and well decommissioning programs to help residents protect their own wells.



### Ground Water Management

NRDs in the Western Platte Basin are addressing ground water challenges in many effective ways. Some NRDs have established a water banking system enabling Districts to purchase water rights which can be used for future agriculture and economic development. A water bank can also be used to reduce irrigation acres if necessary. When NRDs have been granted statutory authority, they have used regulation such as moratoriums on new well drilling in fully appropriated areas. Some NRDs have also chosen to require well metering and placed allocation on ground water pumping as part of their wise ground water management plans.



### Flood Control

One responsibility of NRDs in the Platte River Basin is to build flood control structures to protect lives and property from the damages of flooding. In some instances, the NRDs have stretched the taxpayer's dollar by making these flood control projects multi-use by providing recreation opportunities, valuable wildlife habitat, and creating community betterment.

Hundreds of homes, lives, and millions of dollars worth of crops were protected by NRD flood control projects statewide during the heavy 2008 summer rainfalls. NRD flood control structures pay for themselves by preventing millions of dollars in damages of homes, property, and insuring the safety of basin residents.



Platte River Basin - Learn More about Nebraska's NRDs at [www.nrdnet.org](http://www.nrdnet.org)

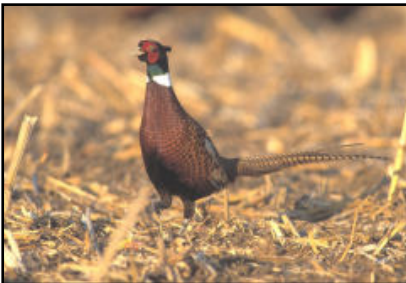
### Better Science Provides Better Management

Platte River Basin NRDs are always looking for more accurate, efficient and cost-effective ways to protect natural resources. The North Platte, South Platte, and Central Platte NRDs have all utilized Magnetic Resonance Sounding (MRS) to gather information on ground water without drilling wells. MRS is a quick, non-intrusive surface technique that directly measures ground water. This technology will be used in place of expensive and time-consuming test holes and aquifer pump tests to locate ground water sources.



Another technology being used to study our underground aquifers is the HEM, or Helicopter Electromagnetic, system. It uses electromagnetic pulses sent out at very high and very low frequencies to map underground features. METRIC, or Mapping EvapoTranspiration with High Resolution and Internal Calibration, uses Landsat (satellite) imagery to compute ET, or evapotranspiration, which is a costly loss to Nebraska's water resources. NRDs seek the support and funding of other agencies such as the United States Geological Survey (USGS), the University of Nebraska, and the Nebraska Environmental Trust to make these studies possible.

### Protecting Nebraska's Natural Habitat



NRDs partner with other agencies to help landowners enroll in conservation programs for better land use and enhancement. These programs include cost-share assistance to plant the corners of center pivot fields to native grasses, small shrubs and trees. This helps attract more wild game birds like pheasant and quail. Much of this land is open for public hunting. Other programs like the

Environmental Quality and Incentive Program (EQIP), and the Conservation Reserve Enhancement Program (CREP) offered through the USDA-Natural Resources Conservation Service (NRCS) have allowed for highly erodible land to become stabilized, and improving air and water quality.

### Protecting Nebraska's Streams and Rivers

NRDs have played an active role in developing ways to protect and maintain stream flows in Nebraska's waterways. NRDs have been working with landowners to prevent flooding and conserve water by removing invasive plant species such as Russian olive trees, salt cedar, and phragmites that are clogging our river channels. NRDs work with landowners to establish grass filter strips by reseeding native grasses, trees and shrubs that provide for river bank stabilization.



## Platte River Basin NRDs

- Protect lives through flood control and ground water monitoring
- Use taxpayer dollars efficiently
- Protect our ground water for future use

NRDs were created by the Nebraska Legislature in 1972, but did not have the authority to institute well moratoriums until passage of LB 962 in 2004. Platte River Basin NRDs have used this authority to make sure ground water is available in this region for generations to come.

Nebraska's NRDs are government by locally elected boards. They have a statutory responsibility to protect the economic well-being of their districts, which means making people and property safe from potentially damaging floods, as well as making sure ground water is safe for human consumption and readily available.

Major river basins form the boundaries of Nebraska's 23 NRDs.

Find out more about  
[Nebraska's NRDs at  
www.nrdnet.org](http://www.nrdnet.org)